



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,683	04/15/2004	Timothy Nephi Tillotson	10030538-1	8077

7590 02/21/2008  
AGILENT TECHNOLOGIES, INC.  
Legal Department, DL429  
Intellectual Property Administration  
P.O. Box 7599  
Loveland, CO 80537-0599

EXAMINER
----------

WON, MICHAEL YOUNG

ART UNIT	PAPER NUMBER
----------	--------------

2155

MAIL DATE	DELIVERY MODE
-----------	---------------

02/21/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/824,683

**Applicant(s)**

TILLOTSON ET AL.

**Examiner**

Michael Y. Won

**Art Unit**

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This action is in response to the amendment filed January 8, 2008.
2. Claims 1-18 have been amended.
3. Claims 1-20 have been examined and are pending with this action.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-12 and 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1-3, 8-12 and 15-20 recites the limitations "**first** client", "**first** instrument application", "**first** client specific protocol", and "**first** instrument application specific protocol" in the claims. There is insufficient numerical antecedent basis for this limitation in the claim.

Claims 4-6 recites the limitation "first protocol". There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the application specific protocol". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Agarwal et al. (US 5,958,010).

**INDEPENDENT:**

As per **claim 1**, Agarwal teaches a method for creating a protocol dependent control path within an instrument system, to allow a first client to communicate with the instrument system, the method comprising a first protocol comprising:

causing the instrument system to identify the first client, wherein the first client is configured to invoke a first instrument application that is part of the instrument system and that controls an instrument that is part of the instrument system (see col.4, lines 15-18: "each capable of requesting service of the server program"), the instrument making measurements of signals that are external to the instrument system (see col.4, lines 2-8: "the console module can receive data about the operations of any node in the network"), wherein the first client is configured to communicate with the instrument system using a first client specific protocol (see col.8, lines 13-18: "aware of the communications protocol for the distributed process or processes"), and wherein the first instrument application is configured to communicate with clients using a first

instrument application specific protocol (see col.3, lines 13-16: "knowledgeable of application protocols to continuously monitor the network environment in real time"; and 27-31: "as the agents are aware of application protocols");

causing the instrument system to identify the first instrument application with which the first client is configured to communicate (see col.3, line 65-col.4, line 7: "a console module for providing a list of plurality of server programs... can couple to a plurality of agent modules");

causing the instrument system to identify the first client specific protocol (see col.8, lines 13-18: "aware of the communications protocol for the distributed process or processes");

causing the instrument system to identify the first instrument application specific protocol (see col.3, lines 13-16: "knowledgeable of application protocols to continuously monitor the network environment in real time"); and

causing the instrument system to automatically create a control path between the first client and the first instrument application (see col.4, lines 15-18: "each capable of requesting service of the server program and having a communication stack for exchanging data with the network"), the control path communicating with the first client using the first client specific protocol and communicating with the first instrument application using the first application specific protocol (inherency).

As per **claim 8**, Agarwal teaches a computer readable memory device embodying a computer program, the program causing a computer within an instrument system to:

cause the instrument system to obtain identification of a client, wherein the first client is configured to invoke an instrument application that controls an instrument that is part of the instrument system (see col.4, lines 15-18: "each capable of requesting service of the server program"), the instrument making measurements of signals that are external to the instrument system (see col.4, lines 2-8: "the console module can receive data about the operations of any node in the network"), wherein the first client is configured to communicate with the instrument system using a client specific protocol (see col.8, lines 13-18: "aware of the communications protocol for the distributed process or processes"), and wherein first instrument application communicates with clients using an application specific protocol (see col.3, lines 13-16: "knowledgeable of application protocols to continuously monitor the network environment in real time"; and 27-31: "as the agents are aware of application protocols");

cause the instrument system to identify first instrument application (see col.3, line 65-col.4, line 7: "a console module for providing a list of plurality of server programs... can couple to a plurality of agent modules");

cause the instrument system to identify the first client specific protocol (see col.8, lines 13-18: "aware of the communications protocol for the distributed process or processes");

cause the instrument system to identify first instrument application specific protocol (see col.3, lines 13-16: "knowledgeable of application protocols to continuously monitor the network environment in real time"); and

automatically cause the instrument system to create a control path between the first client and first instrument application (see col.4, lines 15-18: "each capable of requesting service of the server program and having a communication stack for exchanging data with the network").

As per **claim 11**, Agarwal teaches a computer readable memory device embodying a computer program of instructions comprising a first set of instructions causing a computer within an instrument system to:

cause the instrument system to identify a client, wherein the first client is configured to invoke an instrument application that controls an instrument that is part of the instrument system (see col.4, lines 15-18: "each capable of requesting service of the server program"), the instrument making measurements of signals that are external to the instrument system (see col.4, lines 2-8: "the console module can receive data about the operations of any node in the network"), wherein the first client is configured to communicate with the instrument system using a client specific protocol (see col.8, lines 13-18: "aware of the communications protocol for the distributed process or processes"), and wherein the first instrument application communicates with clients using an application specific protocol (see col.3, lines 13-16: "knowledgeable of application protocols to continuously monitor the network environment in real time"; and 27-31: "as the agents are aware of application protocols");

cause the instrument system to identify the first instrument application (see col.3, line 65-col.4, line 7: "a console module for providing a list of plurality of server programs... can couple to a plurality of agent modules");

cause the instrument system to identify the first client specific protocol (see col.8, lines 13-18: "aware of the communications protocol for the distributed process or processes");

cause the instrument system to identify the first instrument application specific protocol (see col.3, lines 13-16: "knowledgeable of application protocols to continuously monitor the network environment in real time"); and

automatically creating a control path between the first client and the first instrument application (see col.4, lines 15-18: "each capable of requesting service of the server program and having a communication stack for exchanging data with the network");

the instructions further comprising:

repeating first set of instructions for the first client and a second application, wherein the second application is configured to communicate with clients using a second application specific protocol (see col.3, line 65-col.4, line 7: plurality of server programs... console module can couple to a plurality of agent modules") and wherein the second application specific protocol differs from the first instrument application specific protocol (see col.3, line 15: "application protocols" and col.8, lines 13-14: communications protocol").

As per **claim 12**, Agarwal teaches a computer readable memory device embodying a computer program of instructions comprising a first set of instructions causing a computer within an instrument system to:



cause the instrument system to identify a client, wherein the first client is configured to invoke an instrument application that controls an instrument that is part of the instrument system (see col.4, lines 15-18: "each capable of requesting service of the server program"), the instrument making measurements of signals that are external to the instrument system (see col.4, lines 2-8: "the console module can receive data about the operations of any node in the network"), wherein the first client is configured to communicate with the instrument system using a client specific protocol (see col.8, lines 13-18: "aware of the communications protocol for the distributed process or processes"), and wherein the first instrument application communicates with clients using an application specific protocol (see col.3, lines 13-16: "knowledgeable of application protocols to continuously monitor the network environment in real time"; and 27-31: "as the agents are aware of application protocols");

cause the instrument system to identify the first instrument application (see col.3, line 65-col.4, line 7: "a console module for providing a list of plurality of server programs... can couple to a plurality of agent modules");

cause the instrument system to identify the first client specific protocol (see col.8, lines 13-18: "aware of the communications protocol for the distributed process or processes");

cause the instrument system to identify the first instrument application specific protocol (see col.3, lines 13-16: "knowledgeable of application protocols to continuously monitor the network environment in real time"); and

automatically creating a control path between the first client and the first instrument application (see col.4, lines 15-18: "each capable of requesting service of the server program and having a communication stack for exchanging data with the network");

the instructions further comprising:

repeating the first set of instructions for a second client and the first instrument application, wherein the second client is configured to communicate with the instrument system using a second client specific protocol (see col.3, line 65-col.4, line 7: plurality of server programs... console module can couple to a plurality of agent modules") and wherein the second client specific protocol differs from the first client specific protocol (see col.3, line 15: "application protocols" and col.8, lines 13-14: communications protocol").

As per **claim 13**, Agarwal teaches a computer readable memory device embodying a computer program of instructions comprising a first set of instructions causing a computer within an instrument system to:

cause the instrument system to identify a client, wherein the first client is configured to invoke an instrument application that controls an instrument that is part of the instrument system (see col.4, lines 15-18: "each capable of requesting service of the server program"), the instrument making measurements of signals that are external to the instrument system (see col.4, lines 2-8: "the console module can receive data about the operations of any node in the network"), wherein the first client is configured to communicate with the instrument system using a client specific protocol (see col.8, lines

13-18: "aware of the communications protocol for the distributed process or processes"), and wherein the first instrument application communicates with clients using an application specific protocol (see col.3, lines 13-16: "knowledgeable of application protocols to continuously monitor the network environment in real time"; and 27-31: "as the agents are aware of application protocols");

cause the instrument system to identify the first instrument application (see col.3, line 65-col.4, line 7: "a console module for providing a list of plurality of server programs... can couple to a plurality of agent modules");

cause the instrument system to identify the first client specific protocol (see col.8, lines 13-18: "aware of the communications protocol for the distributed process or processes");

cause the instrument system to identify the first instrument application specific protocol (see col.3, lines 13-16: "knowledgeable of application protocols to continuously monitor the network environment in real time"); and

automatically creating a control path between the first client and the first instrument application (see col.4, lines 15-18: "each capable of requesting service of the server program and having a communication stack for exchanging data with the network");

the instructions further comprising:

repeating the first set of instructions for a second client and a second application, wherein the second client is configured to communicate with the instrument system using a second client specific protocol, wherein the second application is configured to

communicate with clients using a second application specific protocol (see col.3, line 65-col.4, line 7: plurality of server programs... console module can couple to a plurality of agent modules”), and wherein the second client specific protocol differs from the first client specific protocol (see col.3, line 15: “application protocols” and col.8, lines 13-14: communications protocol”).

As per **claim 15**, Agarwal teaches a system comprising:

a management logic module configured to obtain identification of a client (see col.4, lines 4-5: “The console module can couple to a plurality of agent modules”),

to obtain identification of an instrument application (see col.3, line 65-col.4, line 7: “a console module for providing a list of plurality of server programs... can couple to a plurality of agent modules”),

to obtain identification of the first client specific protocol (see col.8, lines 13-18: “aware of the communications protocol for the distributed process or processes”),

to obtain identification of the first instrument application specific protocol (see col.3, lines 13-16: “knowledgeable of application protocols to continuously monitor the network environment in real time”), and

to automatically create a control path between the first client and the first instrument application (see col.4, lines 15-18: “each capable of requesting service of the server program and having a communication stack for exchanging data with the network”),

wherein the first client is configured to invoke the first instrument application (see col.4, lines 15-18: “each capable of requesting service of the server program”),

wherein the first client is configured to communicate using a client specific protocol (see col.8, lines 13-18: "aware of the communications protocol for the distributed process or processes"),

wherein the first instrument application is configured to communicate using an application specific protocol (see col.3, lines 13-16: "knowledgeable of application protocols to continuously monitor the network environment in real time"; and 27-31: "as the agents are aware of application protocols"), and

wherein the first instrument application specific protocol differs from the first client specific protocol (see col.3, line 15: "application protocols" and col.8, lines 13-14: "communications protocol").

**DEPENDENT:**

As per **claims 2 and 9**, which respectively depend on claims 1 and 9, Agarwal teaches further comprising:

causing the instrument system to record the identification of the first client (see col.4, lines 8-10);

causing the instrument system to record the identification of the first instrument application (see col.4, lines 8-10);

causing the instrument system to record the identification of the first client specific protocol (see col.4, lines 8-10); and

causing the instrument system to record the identification of the first instrument application specific protocol (see col.4, lines 8-10).

As per **claims 3 and 10**, which respectively depend on claims 1 and 9, Agarwal further teaches wherein first instrument application specific protocol differs from the first client specific protocol (see col.3, line 15: "application protocols" and col.8, lines 13-14: communications protocol").

As per **claim 4**, which depends on claim 1, Agarwal teaches further comprising: repeating the first protocol for the first client and a second application (see col.3, lines 66: "plurality of server programs"), wherein the second application is configured to communicate using a second application specific protocol (see col.3, lines 13-16 and 27-31) and wherein the second application specific protocol differs from first instrument application specific protocol (see col.3, line 15: "application protocols").

As per **claim 5**, which depends on claim 1, Agarwal teaches further comprising: repeating the first protocol for a second client and the first instrument application, wherein the second client is configured to communicate using a second client specific protocol and wherein the second client specific protocol differs from the first client specific protocol (repeating the steps taught by Agarwal does not render the invention novel"; see Fig.1, plural clients).

As per **claim 6**, which depends on claim 1, Agarwal teaches further comprising: repeating the first protocol for a second client and a second application, wherein the second client is configured to communicate using a second client specific protocol, wherein the second application is configured to communicate using a second application specific protocol, and wherein the second client specific protocol differs from

the first client specific protocol (repeating the steps taught by Agarwal does not render the invention novel"; see Fig.1, plural clients).

As per **claim 7**, which depends on claim 6, Agarwal further teaches wherein the second application specific protocol differs from the application specific protocol.

As per **claim 14**, which depends on claim 13, Agarwal further teaches wherein the second application specific protocol differs from the first instrument application specific protocol (see claim 3 and 10 rejection above).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agarwal et al. (US 5,958,010) in view of Sharma et al. (US 5,537,417).

As per **claim 16**, which depends on claim 15, Agarwal further teaches wherein the control path comprises: a communication logic module configured to receive communications from the first client which conform to the first client specific protocol (see col.8, lines 13-18).

Agarwal does not explicitly teach to translate such communications into communications to which the first instrument application is configured to understand

and to which the first instrument application is configured to appropriately react, and to transfer the translated communications to the first instrument application.

Sharma teach to translate such communications into communications to which the first instrument application is configured to understand and to which the first instrument application is configured to appropriately react, and to transfer the translated communications to the first instrument application (see col.4, lines 21-25).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Agarwal in view of Sharma by implementing translating such communications into communications to which the first instrument application is configured to understand and to which the first instrument application is configured to appropriately react, and to transfer the translated communications to the first instrument application. One would be motivated to do so because Agarwal teaches management of applications that operate across heterogeneous environments (see col.3, lines 9-13).

As per **claim 17**, which depends on claim 16, Agarwal further teaches wherein the communication logic module comprises: a server logic module configured to receive the communications from the first client (see col.4, lines 4-7).

Agarwal does not explicitly teach translator logic module configured to receive the communications from the server logic module and to translate the received communications into communications to which the first instrument application is configured to understand and to which the first instrument application is configured to



appropriately react, and to transfer the translated communications to the first instrument application.

Sharma teaches translator logic module configured to receive the communications from the server logic module and to translate the received communications into communications to which the first instrument application is configured to understand and to which the first instrument application is configured to appropriately react, and to transfer the translated communications to the first instrument application (see claim 16, rejection above).

As per **claim 18**, which depends on claim 16, Agarwal further teaches wherein the system further comprises: wherein the first instrument application comprises a virtual instrument and an application component logic module and wherein the virtual instrument is configured to receive communications from the communication logic module (see claims 16 and 17 rejections above).

Agarwal does not explicitly teach to perform any additional translation of the communications into communications to which the application component logic module is configured to understand and to which the application component logic module is configured to appropriately react, and to transfer such communications to the application component logic module.

Sharma teaches to perform any additional translation of the communications into communications to which the application component logic module is configured to understand and to which the application component logic module is configured to

appropriately react, and to transfer such communications to the application component logic module (see claim 16 rejection above).

As per **claim 19**, which depends on claim 16, Agarwal further teaches wherein the system further comprises: an additional communication logic module configured to receive additional communications from an additional client which conform to an additional client specific protocol (see claims 16 and 17 rejections above).

Agarwal does not explicitly teach to translate such additional communications into communications to which an additional application is configured to understand and to which the additional application is configured to appropriately react, and to transfer the translated additional communications to the additional application.

Sharma teaches to translate such additional communications into communications to which an additional application is configured to understand and to which the additional application is configured to appropriately react, and to transfer the translated additional communications to the additional application (see claim 16 rejection above).

As per **claim 20**, which depends on claim 16, Agarwal further teaches wherein the system further comprises: an additional communication logic module configured to receive additional communications from an additional client which conform to an additional client specific protocol (see claims 16 and 17 rejections above).

Agarwal does not explicitly teach to translate such additional communications into communications to which the application is configured to understand and to which

the application is configured to appropriately react, and to transfer the translated additional communications to the application.

Sharma teaches to translate such additional communications into communications to which the application is configured to understand and to which the application is configured to appropriately react, and to transfer the translated additional communications to the application (see claim 16 rejection above).

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

After further consideration and searching, Agarwal et al. (US 5,958,010) has been cited to better teach the amended limitations of claims 1-16. Furthermore, Sharma et al. (US 5,537,417) has been cited to teach the missing limitations of claims 16-20.

### ***Conclusion***

10. For the reasons above, claims 1-20 have been rejected and remain pending.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL Y. WON whose telephone number is (571)272-3993. The examiner can normally be reached on M-Th: 10AM-8PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:  
10/824,683  
Art Unit: 2155

Page 20

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Won/

Primary Examiner 2155

February 8, 2008